

### Amendments to the Specification

Please replace paragraph [046] with:

[046] Figure 2 shows the structure of the  $m$  pseudo-noise (PN) training sequences 200 according to the invention. Each of the multiple training sequences uses fifteen symbols 201-215. Each symbol is 75 nsec in duration, followed by a guard interval of 125 nsec, for a total of 1250 nsec. If the sequence is repeated fourteen times 211-224, then the channel coefficients can be estimated in 17.5  $\mu$ sec 250, followed by 2.5  $\mu$ sec 270 for equalizer coefficients estimation, for a total of 20  $\mu$ sec. The sequences can be the same or different.

Please replace paragraph [027] with:

[027] Figure 7 is a block diagram of a UWB receiver according to the invention; and

Please add the following paragraph after paragraph [027]:

Figure 8 is timing diagram of rough and accurate estimates of an impulse response according to the invention.